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ABSTRACT

The concept of organizational climate came from a desire to understand person-environment interactions. Most research has focused on the development of measuring instruments and much less has focused on development of a theory base. The small amount of existing theory has been used as a beginning for measurement activities. The lack of theory may reflect the need of behavioral scientists to have quantitative data and the lack of communication between researchers and practitioners. Recently researchers have begun to recognize the need for a sound theoretical base. Valuable results obtained from previous research include the following: (1) no consensus exists as to whether current techniques are measuring perceptions of individuals or organizational attributes; (2) no data shows organizational climate affecting organizational outcome; (3) organizations have a set of climates; (4) no research accounts for the positive nature of organizational climate scores; and (5) instruments measuring organizational climate have not been validated. Future research should be applied to developing a theoretical base. A seven-page reference list concludes the paper. (ABL)

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# ORGANIZATIONAL CLIMATE: MYTH AND MEASUREMENT

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ABSTRACT:

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TITLE: Organizational Climate: Myth & Measurement

ABSTRACT: Through a chronological review of the literature, the concept of Organizational Climate (OC) and the difficulties inherent in its measurement are examined. Intuitively, OC seems a useful concept in the diagnosis of organizational health. When we attempt greater precision, however, the concept becomes tenuous. Does OC really exist or is it a unreliable myth whose meaning varies from person to person? If it does exist, is it an attribute of an organization, or an aggregate summary of individual perceptions? In either case, is it measurable? If so, can it be done directly or must it be inferred from the subjective descriptions of individuals? In the latter case, are we measuring descriptions or evaluations? Further, if the responses are evaluative, how do we account for their ipsative nature? Other difficulties are posed by statistical techniques: how do we interpret a mean response? of what significance is standard deviation? how do we establish validity? Finally, what is the utility of the concept? Is it significantly correlated with other dimensions of organizational activity? Does it usefully predict anything? Can it be influenced or changed, and to what purpose?

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## INTRODUCTION

This paper evolved out of a fascination with the concept of organizational climate. In an everyday sense, we are all quite familiar with the different affective tones created by different organizations. We would, for instance, never mistake the distinctive feeling associated with our family of origin for the feeling associated with the family of a current neighbor.

Likewise, the affective presence we sense in one organization is very different from that of another. And this presence is immediately and palpably noticable. Imagine if you were to guide us through a familiar place (your bank, or place of worship, or employment) and that we paid especial attention to our senses. What would we see, or hear, or feel about this place? Would we notice the distinctive choice of forms and colors; perhaps some particular smells; the arrangement and interrelationship of objects and persons; sounds of varying intensities and qualities; the tone of peoples' voices; peculiar words and jargon; gestures and body language?

Those things we would notice certainly, and perhaps more certainly, we would notice how the members of that group act toward each other, and how they act toward you, and toward me. And out of this avalanche of data, we could find emerging a

general sense of the organization: a presence or personality which expresses itself through countless behavioral cues.

If I asked you now to describe the nature of this presence, or this "thing" behind the behaviors, what would you say? Would you say that it is warm and friendly, or bold and innovative, or sterile, or hostile? And would your impression agree with mine?

What difference does it make, how we feel about an organization, or the characteristics we ascribe to its collective "personality"? Does it influence whether we join it, or do business with it? Does it effect and shape our behavior while we interact with it? Does it have any relationship with the types of outcomes the organization experiences: growth, stagnation, decline?

In a larger sense, how does one organization effect another? How do innumerable organizations interact and interlock such that we can infer a thing called a "national personality" or "culture?" What is the sum total of this thing? Is it the species? And what about sickness and health? Is there such a thing as a healthy organization, or a sick one? And are diseases of this type contagious?

These are some of the questions that are compelling me to try to understand the roots of organizational behavior. What if we could understand the thing that is behind the behaviors? Would we then have a chance at influencing the outcome? This paper is an initial attempt at understanding one manifestation of the "thing behind the behaviors" and it is written in the

hope that someday we may know enough that we can avoid speaking of our species on this planet as Black Elk (Neihardt 1932) spoke of his nation:

> "I did not know then how much was ended. When I look back from the high hill of my old age, I can still see the butchered women and children lying heaped and scattered all along the crooked gulch as plain as when I saw them with eyes still young. And I can see something else died there in the bloody mud and was buried in the blizzard. A people's dream died there. And it was a beautiful dream.
>
> And I, to whom so great a vision was given in my youth - you see me now a pitiful old man who has done nothing. For the nation's hoop is broken and scattered. There is no center any longer, and the sacred tree is dead." (p 230)

## SECTION ONE: GENERALITIES

What is it like to live and work inside an organization? The most convenient and descriptive term coined to date is "Organizational Climate" (OC). At first mention, it seems obvious that we all know what it means. What is it like to live in the New England region instead of the South West? What is it like to work for your employer instead of mine? Climate "A" seems warm and supportive, whereas Climate "B" feels cold and hostile.

When we try, however, to understand more exactly what we mean, the concept becomes tenuous. Does OC really exist (in the same sense, as, say, Thermodynamics), or is it a fuzzy, unreliable term: a myth whose meaning varies from person to person? If it does exist, is it an attribute of an organization ("the temperature of the air is 97 degrees"), or is it an aggregated summary of individual perceptions ("most people feel hot today")?

In either case, can it be measured? If so, can it be done directly and objectively via a "thermometer", or must it be inferred from the subjective descriptions of individuals? If it is to be measured through individual descriptions, how can we be sure that we are measuring descriptions and not evaluations? Further, if the responses are evaluative or attitudinally influenced, how do we account for their ipsative na-

ture, ie, how do we meaningfully interpret responses that have no common absolute referent? A person from Montana will have a meaning attached to "warm" that is different from that of a person from Florida.

Another difficulty is posed by the statistical aggregation of responses. How do we interpret a mean response? Suppose 5 respondents indicate that a climate is "warm" and 5 indicate that it is "cold." What does this tell us - that it is neither, or both, or only lukewarm? Is a mean response valid only if it has a low standard deviation? If so, what is "low"? And does not a wide range of responses give equally meaningful insight into an organization's climate?

Assuming OC exists and can be measured, what are its components or dimensions? Should they be generic and applicable to all types of organizations? If OC is a dynamic condition as opposed to a static state, how can a measurement instrument be tested for reliability? How does one establish the validity of a measurement? To what can it be compared as an objective or absolute referent?

Finally, assuming all these issues can be satisfactorily resolved, there are still more cogent questions. What is the utility of the concept? What is the value in knowing the "temperature" of an organization? Is it significantly correlated with other concepts, measurements, or dimensions of organizational activity? Does it usefully predict anything? Can it be changed? If so, how? And will changing OC change anything else?

Since, intuitively, OC seems a potentially useful concept in the diagnosis of organizational health, and since Organizational Development (OD) practitioners often make OC measurement an interventional conerstone, a computer search of the OC literature (in Psychology, Sociology, Education, and Business) was conducted in the spring of 1985 yielding close to 600 references. A culling of those references resulted in 30-40 articles covering the period whose primary focus was OC theory and research. A hunt through the bibliographies of those references led to an equal number of useful articles.

Less hardy readers may prefer to stick with the following review (a known evil is better than an unknown one?), or instead go to one of the many excellent and comprehensive reviews of OC literature (Forehand and Gilmer, 1964; Campbell, et al, 1970; James and Jones, 1974; Hellreiegel and Slocum, 1974; Payne and Pugh, 1976; Woodman and King, 1978; Field and Abelson, 1982; and Schneider and Reichers, 1983). These authors not only review OC research and theory, but also raise and address questions similar to those cited earlier.

One of the most consistent themes throughout the review literature is a concern that researchers are over-ready to measure and analyze data about a concept that is not only initially ill-defined but also lacking a consistent and comprehensively applied theoretical context. Accordingly, I would like to survey in some depth the chronological evolution of

the concept and its associated research.

## SECTION II: THE LITERATURE

One of the first investigations into OC, though not termed as such, was by Lewin, Lippitt, and White (1939). Their intent was to explore some of the factors that might cause different groups to be described as "authoritarian," "democratic," or "laissez-faire." Their assumption was that leadership style was a key factor in determining the level of aggression expressed by a group. In their experiment, they introduced into groups of 10 year old boys a sequence of different leaders whose styles fit into one of the three categories mentioned above.

The results, based on direct observation and measurement of aggressive acts per time period, indicated a clear relationship between leadership style and the level and type of aggression expressed by a group, that is, when the leader was changed, the group behavior changed. The implication, in terms of OC, is that climate (or at least one dimension of it) is a dependent variable of leadership style. Indeed, much later research would be devoted to an exploration of this relationship in the context of business management.

Initially, successive research focused on children in educational settings in an attempt to quantify and describe

the nature of person-environment interactions. Withall (1949) proposed one of the first definitions of "climate," and one that postulated it as a fairly powerful environmental influence:

> "Social-Emotional Climate ...the emotional tone which is a concomitant of interpersonal interaction... Operationally it is considered to influence: (1) the inner private world of each individual; (2) the esprit de corps of a group; (3) the sense of meaningfulness of group and individual goals and activities; (4) the objectivity with which a problem is attacked; and (5) the kind and extent of interpersonal interaction in a group." (p 348,9)

Also in the context of learning was a study by Pace and Stern (1958) of college environments. Starting from a theory based on personal needs and environmental "press" (Murray, 1938), they constructed a College Characteristics Index (CCI) which described the overall picture of a college environment. At the time, they cited two additional ideas as a potentially useful outgrowth of their work: the possibility that the CCI could be used as a tool for institutional self-assessment and change; and the possibility that it might also prove to be a reliable predictor of individual performance.

These two ideas capture some of the allure that the concept of OC has had for both practitioners and theoreticians: that the potential for organizational change can be increased when members are "fedback" instrumented data that allows them to assess their climate and its impact on overall performance.

Simpson (1963) took a somewhat narrower focus by describing "Social Weather" as the "...overall social treatment given

a particular individual in behavior setting." (p 219) The Social Weather Scales measured the affective tone directed toward children along three dimensions: Warmth; Tendance; and Indulgence.

Meanwhile, many researchers were trying to understand business organizations from a climate perspective, and it is this branch of OC research that we will primarily pursue. Forehand and Gilmer (1964) presented one of the first comprehensive reviews of this work. They found that the major climate variables distinguished to date were: Size; Structure; Complexity of Systems; Goal Directions; and Leadership. In the review, they drew the first explicit analogy between the personality of an individual and the personality of an organization.

In addition, they raised the question as to whether the variance between different measurements of climate was due to the different properties of organizations or whether it was due to the different processes of individual perception. This question has turned out to be a difficult one to answer and has been a subject of much ensuing research and debate.

One of the first hard-cover volumes on OC (Taguiri, 1968) contained this definition of OC:

> "...the relatively enduring quality of the total environment that (a) is experienced by the occupants, (b) influences their behavior, and (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the environment." (p 25)

A similar definition, but from a different theoretical base was advanced by Litwin and Stringer (1968) in a classic

study at Harvard University. Their concern was to apply the motivational theory of McClelland (1961) and Atkinson (1964) to organizational behavior in the context of laboratory created "businesses" staffed with student volunteers.

They hypothesized OC to be an intervening variable between individual motivational needs (Power, Achievement, Affiliation) and organizational factors (Technology, Structure, Leadership, Management, and Decision-making). In this model, the perceived climate would interact with individual need to create behavior. Litwin and Stringer defined OC as:

> "..a concept describing the subjective nature or quality of the organizational environment. Its properties can be perceived or experienced by members of the organization and reported by them in an appropriate questionnaire." (p 187)

The critical dimensions of OC identified were: Experienced Warmth; Perceived Structure and Constraint; Emphasis on Reward vs Punishment; and Perceived Performance Standards. Experimental manipulations of organizational factors were found to have a significant effect on perceived OC and on the type of motivational needs aroused. Additionally, they found motivational climate to be significantly related to end result performance measures (cost, quality, innovation, new contracts).

Also of interest is their expansion of the definition to include the concept of measurability via questionnaires. This emphasis on quantifiable measurement in survey format (multiple choice) has been an enduring characteristic of OC research

and application. One might wonder to what extent the focus on the mode of instrumentation has affected the direction and shape of OC theory, ie, is the dog wagging the tail, or the tail wagging the dog?

Another model, developed by Schneider and Bartlett (1968, 1970), examined the relationship between individual ability and the situation in which the individual performed. They developed an instrument called the Agency Climate Questionnaire (ACQ) which measured six climate dimensions at life insurance agencies: Managerial Support; Structure; Concern for New Employees; Intra-Agency Conflict; Agent Independence; and General Satisfaction. Their findings:

> "...argue strongly for caution in drawing conclusions about the climate or any other perception-based statement regarding an organization and its members." (p 509)

This warning reflected the fact that they found a significant lack of agreement in the description of OC between levels of an organization (Manager, Assistant Manager, Agent). One might draw two different conclusions from this: 1) that there can be many climates in an organization; and 2) that there is no such global attribute as OC, only varying and individual perceptions.

Campbell, et al (1970) were interested in OC as a variable in the determination of leadership effectivenss. They defined climate as:

"... a set of attributes specific to a particular or-

> ganization that may be induced from the way that organization deals with its members and its environment. For the individual member within the organization, climate takes the form of a set of attitudes and expectancies which describe the organization in terms of both static characteristics (such as degree of autonomy) and behavior-outcome and outcome-outcome contingencies." (p 390)

After reviewing much of the literature, they suggest four factors common to all investigations of OC: Individual Autonomy; Imposed Structure; Reward Orientation; and Consideration, Warmth and Support. They also point out, in reference to the continuing debate (as to whether OC is an individual perception or objective attribute), that these two assumptions operate at different levels of explanation and distance from the independent variable (organizational outcome).

In their view, psychological processes (Warmth, etc) are "farther" away from the outcome than organizational processes (Size, Structure) and hence pose a more difficult and complex relationship to explain causally. They also note that what may be an approriate climate in one organization, may not be so in another.

Payne and Phesey (1971) adapted Stern's index to a business application and measured two British firms. Their findings indicated an agreement on perception of OC between two different levels of the organization (upper and middle management) which is an apparent contradiction to the findings of Schneider and Bartlett discussed above. The authors, while cautioning that they did not include shop-floor workers in their study, suggested that the mean score of individuals is a valid indicator of the general organizational climate.

House and Rizzo (1972) constructed a questionnaire based upon the Theory X/Theory Y perspective (McGregor, 1960) and on the Organic-Mechanistic perspective (Burns and Stalker, 1961; Lawrence and Lorsch 1967). The former theory has been well popularized and does not need to be restated here. The latter contrasts loose, non-hierarchical, open and collaborative "win-win" organizations with tightly controlled, hierarchical, low trust, "win-lose" organizations.

In their study, they established construct validity by pairing proposed a priori OC scales with criterion scales from other non-OC questionnaires, ie, ones dealing with Leadership and Satisfaction. Their findings showed significant correlation between the pairs thus allowing the deduction that if the criterion scales validly measure something, so then must the OC scales measure something. This might therefore give some credence to the theoretical assumptions from which the OC scales were derived, although it is not exactly clear what the "something" measured was/is. On a final note, they validly point out a critical, and often ignored, problem in OC research:

> "To date there are no methods for assessing organizational effectiveness other than invalidated opinion or gross end result or economic measures." (p 396)

This concern goes straight to the heart of the issue for OC in the context of "bottom-line" business: of what use is the concept of OC if it can not be directly correlated with a measure of organizational effectiveness? And if that cannot

be determined for results-oriented business, how much more difficult would it be to establish such a correlation for a family, classroom or institution? Unfortunately, the majority of research effort to date (despite the promising beginning of Litwin and Stringer) has merely tried to prove that OC questionnaires can be constructed that measure a priori theoretical constructs with some degree of internal validity.

Johannesson, in a provocative article (1973), questioned what that "something" was that perceptually-based OC scales appeared to measure. His review suggested that most of the OC instruments were based on items borrowed from other contexts - predominantly from the study of Job Satisfaction. An empirical study led him to conclude that:

> "If it appears as if perceptual climate research is converging upon any domain, job satisfaction seems the likely candidate. Indeed it is hard to imagine how this possibly could have been avoided. Even if researchers had taken the pains to create new items and had adopted different item formats (which they have not) there remains the psychological problem of divorcing description from feelings." (p 141,2)

This article touched off a debate that would reverberate through the literature for many years. Before following that major theme however, we should look at two other authors whose contributions seem to have been largely overlooked. Craik (1972) discussed the assessment of places in terms of object layout, spatial features and behavioral characteristics such as density, activity patterns and frequencies. Although, intuitively, it would seem that such variables should have some relationship with OC (as the height and width of mountains

have with atmospheric climate), I have found no literature that relates OC to such characteristics.

Moos (1973) proposed what is arguably the most comprehensive taxonomy to date. In his research and discussions of Human Environments, he suggested six major categories:

> "...(1) ecological dimensions, which include both geographical-meteorological and architectural-physical design variables; (2) behavior settings... (3) dimensions of organizational structure; (4) dimensions identifying the collective personal and/or behavioral characteristics of the milieu inhabitants; (5) dimensions related to psychosocial characteristics and organizational climates; and (6) variables relevant to the functional or reinforcement analyses of environments." (p 652)

Within the specific context of OC, his research generated perceived climate scales for a variety of organizational types. His findings suggest that there are three general dimensions applicable across all organizations: Relationship; Personal Development; and System Maintenance and Change. With Insel (1974), he reviewed existing OC instruments and found their dimensions to suggest a correspondence with the three general ones he proposed earlier.

In terms of work environments, Moos (197?) proposed specific scales. For the Relationship dimension they are: Involvement, Peer Cohesion, and Staff Support. For the Personal Development dimension they are: Autonomy and Task Orientation. For the System Maintenance and Change dimension they are: Work Pressure, Clarity, Control, Innovation and Physical Comfort.

[Interestingly, he briefly discussed the potential rela-

tionship between some aspects of climate and individual health. This is a relationship that has not been investigated in the OC literature although there appears to be increasing interest in the medical profession.]

Moos also discussed the utility of the climate concept and his position was not much changed from the hopes raised by Pace and Stern some dozen years previously: that feedback of data will motivate an organization to seek change. (Curiously, the OC literature does not include any research on the effectiveness of the OC concept as applied in organizational intervention. Yet, as stated earlier in this section, this practice is common among practitioners. This suggests a situation in which there is little fruitful dialogue between the research of theoreticians and the work of practitioners.) Moos concluded on a rather pessimistic note:

> "Everyone seems to agree that currently available descriptions of social environments are woefully inadequate. These descriptions generally characterize the environment as it is seen by a very small and unrepresentative sample of the people in that environment, such as a company manager or administrator. In addition, they usually report on those characteristics of the environment that do not really give a "feel" of how that environment actually functions." (p 37)

Returning to the mainstream of OC literature, we find similar pessimism, though for different reasons. Guion (1973) raised again some of the issues posed by Johannesson above. He pointed out that unless there is some objective referent, one cannot tell whether a climate perception is accurate. He also commented on the tautological reasoning that would relate

OC to Job Satisfaction (JS) when they are in fact both based on the same perceived data.

In a thorough review of the literature, James and Jones (1974) attempted to bring some order to the logical and semantic confusions. They suggested that there are three different assumptions behind the study of OC: one that hypothesizes OC as an organizational attribute subject to multiple measures (leadership, size, structure, etc); another that likewise hypothesizes OC as an organizational attribute, but subject instead to perceptual measures; and a third that hypothesizes it as an individual attribute subject to perceptual measures.

The authors proposed that researchers differentiate between the last approach and first two, by terming the individual attribute "Psychological Climate" (PC) and the organizational attributes OC. Additionally, they highlighted a number of concerns that needed to be addressed if OC were to become a useful and valid concept. A major problem was that:

> "Many climate researchers appear to be more concerned with measurement techniques than with understanding or explicating the underlying concepts... Only after the conceptual boundaries of organizational climate are spelled out should the measurement and operationalization become matters of major concern." (p 1008)

Hellriegel and Slocum (1974) also reviewed existent literature and analyzed thirty-one studies that included OC as a key variable. The studies were categorized according research vigor, nature of the OC variable (dependent, independent, moderating), type of instrument used, and sample type and size. With regard to perceptual measurement instruments, they note

the proliferation of dimensions, number of items, and also an

> "... overemphasis, relatively speaking, on people oriented scales... [which] may be partially a consequence of abstracting climate items from satisfaction scales." (p 262)

They also found that while there were some studies that showed a significant relationship between performance and climate, that this "... is not as easily understood, or as persuasive, as the relationship between job satisfaction and climate." (p 271) Additionally, they found little research that dealt with the impact of the external environment and technology on an individual's perception of climate. In a complex and dynamic situation, these may be critical variables to understand. In their summary they state that:

> "In the future, researchers should concentrate on both external and internal criteria and how these criteria are linked together. Causal links between climate and measures of job performance, turnover, grievances, and the like should be investigated further.
>
> As indicated... few studies have achieved a sophisticated level of research rigor... researchers have not controlled for the impacts of structure, technology, or environmental uncertainty on climate perceptions. Similarly, the possiblility of interactions betweeen other organizational variables, such as rewards, communication linkages, locus of decision making, and climate, has not been explored." (p 277)

Lawler, et al, (1974) conducted research in an attempt to determine the relationship between OC and, on the one hand, organizational structure and process, and on the other, organizational performance and JS. The results (not surprisingly) showed OC most highly correlated (.47) wih JS. The next high-

est correlations were with organizational process (.34) and performance (.25).

Schneider (1975) took a refreshing and different tack and discussed the function of OC perceptions in the context of the psychological theories of Gestalt and Functionalism. This led him to the interesting conclusion (albeit with no clear evidence) that performance is a result of "... ability and a climate which stresses the display of individual differences." (p 457)

In the same article, he discussed the issue of aggregated responses and concluded, after a review of several studies, that aggregation provides reliable data. When developing an instrument, he recommended that those items which generate responses of low standard deviation are the more appropriate indicators of climate. Importantly, he also suggested that: each organization may have more than one climate; and that JS and OC do differ in that, while both are attitudinal in nature, JS refers to an inner affective state while OC refers to a perception of what is "out there." In conclusion he offers a definition of Climate:

> "Climate perceptions are psychologically meaningful molar descriptions that people can agree characterize a system's practices and procedures. By its practices and procedures, a system may create many climates. People perceive climates because the molar perceptions function as frames of reference for the attainment of some congruity between behavior and the system's practices and procedures." (p 474)

Schneider and Snyder (1975) examined the relationship between OC and JS in more depth. Their premise was that, if OC

is a global and summary perception of an organization and JS is an personalistic evaluation of specific job conditions, that there therefore should be more agreement among respondents regarding the form r. Their study, in sharp contrast to Johannesson's, found that for some people there is strong correlation between OC and JS and for others there is none. Thus OC and JS would not appear to be redundant measures of the same "something."

This conclusion is supported in part by Downey, et al (1975) who found JS to be a function of the interaction between individual personality and individual perception of OC. Their work begins to hint at the complexity lurking behind such an apparently simple and common-sense concept such as OC:

> "The results demonstrate that a single personality dimension may interact with more than one climate dimension. This, in turn, suggests that future researchers consider the interaction of personality and climate dimensions and their influence on job satisfaction and performance as being more complex than might have been expected." (p 154)

An attempt to further explore the nature of this interaction was conducted by Gavin (1975). He attempted to correlate organizational variables (composition, organization, task content, physical environment) and biographical variables (work-oriented, socially-oriented, atonic) with OC perceptions (using a questionnaire adapted from Litwin and Stringer, and from Sells). The results showed no significant variance in perception of OC between the two variables. Although the study seems in retrospect a step in the right direction, the

clumping together of three disparate theoretical typologies probably doomed it from the start.

At this stage in the evolution of OC, researchers began to look back and question the validity of some of the original work. Sims and LaFollette (1975) conducted an analysis of the Litwin and Stringer questionnaire. While carefully pointing out that the original authors had themselves questioned the reliability and validity of the scales, Sims and LaFollette remarked that:

> "The results of this study have indicated considerable doubt that the original Climate a priori scales were able to measure what they were purported to measure. While the instrument was supposed to be measuring specific facets of an organization such as structure and standards, the Climate instrument was actually measuring a general affect tone toward other people and a general affect tone toward management." (p 36)

Appropriately, they cautioned researchers against blind acceptance of previously developed scales. They also speculated that the "overemphasis" on people-oriented scales reported by Hellreigel and Slocum may be a subtle result of the development of such scales by persons in a humanistically oriented profession.

Muchinsky (1976) attempted to replicate the Sims and LaFollette study using the same Litwin and Stringer questionnaire on a different sample. He found that there were significant differences in the resultant factor structures. These differences appeared to be related to specific features unique to the different samples (physical location, work practices,

goals, etc). These results led him to the conclusion that:

> "... [the findings suggest] that it may be very difficult to arrive at some "standardized" climate inventory that will manifest high scale validity and reliability across many different organizations... Since climate is typically defined as perceptions of a work environment, it may well be that different types of organizations have relatively unique work environments." (p 387)

Gavin and Howe (1975) adopted the proposal of James and Jones that OC should be distinguished from PC and proposed that PC becomes OC when there is a significant consensus among the members of a group. They also proposed a complex model for understanding the relationships among: environment (external and internal); personal characteristics; joint person and organization variables; PC; motivational variables; behavioral and affective outcomes; and organizational outcomes.

They also found support for the hypothesis (first advanced by Schneider and Bartlett) that individuals at different organizational levels have different perceptions of OC. In addition, they also found very low correlations between OC and performance, thus echoing Gavin's earlier conclusion.

The "many climates" conception was given further support in a study by Johnston (1976). He found that that there were different climate perceptions according to generational membership in the organization, that is, first generation members had climate perceptions that were very different from those of second generation members.

Jumping ahead a bit, James and Jones (1979) in a study of multiple, divergent samples (including 4000 Navy personnel)

found that:

> "... the functional type of division [Missles, Communications, Engineering, etc) appeared more important in the formation of of individual perceptions than was the superordinate, formal organization. In other words, there appeared to be greater similarity of perception for similar divisions from different ships than for dissimilar divisions from the same ship." (p 244)

This does begin to complicate the problem of what we mean when we refer to <u>the</u> climate of an organization: not only might it be a different set of dimensions depending upon the organization, it might also be different according to respondents' function, position in the hierarchy, and generational membership!

Returning to the other major themes of the literature (OC vs JS; organizational attribute vs individual attribute; and objective description vs perceptual description) Payne, et al (1976) proposed a unique and helpful schema for sorting out some of the confusion. Their model, based on facet analysis, provides for three levels of analysis based on the concept being explored: individual vs aggregate grouping; job specific vs organization specific focus; and affective vs descriptive response. The resultant schema is:

| UNIT OF ANALYSIS | ELEMENT TYPE | NATURE OF RESPONSE | DESCRIPTION |
|---|---|---|---|
| Individual | Job | Affective | Job Satisfaction |
| Individual | Job | Descriptive | Perceived Job Characteristics |
| Individual | Org. | Affective | Satisfaction with Org. |
| Individual | Org. | Descriptive | Perceived Org. Characteristics |

| | | | |
|---|---|---|---|
| Aggregate | Job | Affective | Role Morale |
| Aggregate | Job | Descriptive | Role Climate |
| Aggregate | Org. | Affective | Organizational Morale |
| Aggregate | Org. | Descriptive | Organizational Climate |

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While perhaps a bit cumbersome, this model does point out the possibility for confusion when researchers fail to clearly specify the level of analysis and nature of conceptual approach. Surprisingly, there are no references to this model in later research.

The most comprehensive review of OC published to date is that of Payne and Pugh (1976). They discuss the research in terms of organizational structure (OS) vs OC as well as individual variables and the perceptual measures of OS/OC vs objective measures. Their rather pessimistic conclusions are worth quoting at some length:

> "Both structure and climate are multi-dimensional and consequent interactions are too complex to substantiate simple hypotheses about the effects of structure on behavior... " (p 1152) [with the one notable exception that] "...organizational size did influence perceived climate." (p 1167)
>
> "Different operationalizations of each of the structural and climate measures have shown low correlations with each other... Perceptual measures of each... have varied so much among themselves that mean scores were uninterpretable... Furthermore, we have no useful theory to predict likely differences due to sampling...
>
> Future research can ignore most of these studies and utilize a completely different approach. We need a deep involvement from the members of a complex system to gather meaningful data which accurately reflect these people's experiences. The researcher must create a relationship of trust and openness with his research clients to avoid the unintended consequences of rigorous research." (p 1168)

Muchinsky (1977), in a study exploring the relationship of communication with JS and OC, recognized some of the on-going difficulties associated with OC research, namely: confusion about the level of analysis being conducted (OC vs PC); and instrument items which, while intended to elicit descriptions, contain instead implicit orientations that evoke evaluative responses. He concluded that "... we must be cautious not to create artifactual (method-bound) concepts." (p 605)

Howe (1977) attempted to delimit the concept of OC by referring specifically to "group" climate. Here, the level of analysis is neither the total organization (OC) nor the individual (PC), but rather a formal sub-unit. In contrast to some studies whose instrument items do not specify what is meant by such a referent as "your work environment" or "your organization," Howe, very commonsensically, recommends that:

> ".. if one is interested in department climate, the climate questions should specifically ask about one's department and the statistical analysis should be conducted combining persons from the same department." (p 109)

Contrary to the general trend toward delimitation of the OC construct were the findings of Drexler, et al (1977). Their research results supported the contention that OC measures could significantly differentiate between organizations and that:

> "... while there are differences in organizational climate across departments in the same organization, the departmental effects are much weaker than the or-

ganizational effects." (p 42)

(Of interest is the fact that they used not the Litwin and Stringer questionnaire nor any of the myriad others reported in previous literature but rather the Survey of Organizations (SOO) developed at the Institute for Social Research at the University of Michigan. The SOO, at the time of Drexler's study, had a data bank of over 1,200 organizations and almost 7,000 individuals. The development, modification, validation and reliability testing of this instrument are documented by Taylor and Bowers (1972). It appears to be the most thorough, comprehensive, and carefully constructed instrument in the OC field and contains items designed to be as descriptive and non-evaluative as possible, while yielding considerable data on not only OC, but also JS and Leadership.)

Back in the other direction, Zultowski, et al, (1978) researched the effects of OC as a moderating variable on employee satisfaction and goal-setting. Consistent with the mainstream, their results:

> "... were not sufficiently strong to warrant a general statement regarding a pervasive moderating effect of organizational climate. Furthermore, it appears that any moderating effects of organizational climate are specific to particular climates and particular goal-setting attributes." (p 225)

It should by now be becoming clear that it is very difficult to generalize about OC: what it is, what its dimensions are, and what relation it has to organizational outcomes. The picture that is beginning to emerge is one of a concept that is situationally dependent upon a large set of complicated

factors specific to each organizational setting.

OC research, by contrast, seems to have focused on discerning some key aspects of an organization (based on some general a priori assumptions) and then trying to apply those generalizations to other organizations. Since it seems reasonable to assume that organizations are at least as diverse as individuals, such a deductive approach might well be expected to be fruitless. It may also account for the apparent lack of interaction mentioned earlier between researchers and practitioners. Offenberg and Cernius (1978) commented on this state of affairs and conjectured that it:

> "... seems to have arisen because of a divergence between the interests of change agents and those of social scientists - change agents are concerned with understanding the dynamics underlying behavior in a particular organization; scientists are concerned with understanding the general laws that explain the behavior of all organizations. As a result, when the focus changes from understanding organizational behavior in general to understanding a particular organization, there proves to be a paucity of applicable ideas, theories, and procedures (Jenks, 1970) and an absence of coherent data-gathering and analysis strategies (Pugh, 1969)." (p 79, 80)

The authors then proposed an "ideographic" approach which would yield a unique description of an organization along a particular dimension. They constructed an instrument which elicited descriptions of behavior based on the social exchange theory of Thibaut and Kelly (1959) and then factor analyzed the results. They concluded that such an approach provided valid descriptions of different organizations.

Woodman and King (1978) reviewed the state of OC and con-

cluded that "The major unresolved research issues center on the the question of validity..." (p 823). As we have seen, most studies to this date have concentrated on establishing the internal validity of instrument scales, and rarely attempted (or succeeded) in either replicating results or in establishing a strong correlation with organizational outcomes. The authors concluded that:

> "Perhaps the concept of organizational climate never will lend itself to unambiguous causal statements of fact. Perhaps climate is destined to remain theoretically promising but methodologically unsound... In any event, until these issues of validity can be resolved, much speculation about organizational climate is likely to elude science and remain in the realm of organizational folklore." (p 824)

In a British study that same year, Payne and Mansfield found, again consistent with published literature, that organizational structure or context had little effect on individual perceptions of OC. They did find however that the views of others had a considerable and pervasive effect.

Hendrick (1979) took a different approach from most OC researchers and discarded a priori assumptions and strict instrumentation and attempted to build a model based on a number of unstructured interviews in a military environment. Sensitive to the potential pitfalls of this method, he nonetheless suggested that unstructured interviews provide a useful way of getting insight into OC and sugggesting the relationship of different elements (in his case, leadership behavior, OC and unit effectiveness).

Writing from a sociological/ecological perspective, Wicker

(1981) noted that most environmental assessment techniques have been derived from psychological techniques originally developed for individuals and are therefore person-oriented in nature. He states that:

> "Person-centered environmental assessments do not, however, provide a fully adequate view of the immediate context of human behavior... Such methods limit our understanding to the perspectives of participants in various environments. More complete knowledge can be obtained through ecologically oriented methods that assess human environments more directly and that seek to understand environmental structures in terms of their own unique features." (p 24)

He then proceeds to define the concept of a "behavior setting" as:

> "... a small-scale social system whose components include people and inanimate objects. Within the temporal and spatial boundaries of the system, the various components interact in an orderly, established fashion to carry out its essential functions." (p 25)

Such settings may be both surveyed (quantitative procedures for describing and documenting the setting) and analyzed (direct observation and qualitative assessment). In terms of the latter, he emphasizes that "Researchers need first to acquire a sensitive, qualitative understanding of what goes on in the settings they intend to study." (p 52)

This suggests that OC research, with its predominate methodology of mailing or administering multiple choice instruments in the context of a one-time intervention by an external scientist, may be blind to other potentially larger effects in the organization. This idea is also voiced by Rao and Sagi

(1982):

> "One rarely, if ever, comes across studies which have used field work methods of investigation of OC based on long and continuous periods of observation... from multiple sources of information and intimately interacting with organization members to get the insider's view of the organization in his own terms..." (p )

They also discuss, from a philosophical point of view, the nature of OC and find it not to be especially amenable to quantitative approaches. They conclude that:

> "The determination of objectivity of OC comes thus to rest on grounds of experience and not on grounds of its measurability or generalizability... It is a member's consciousness of the quality and tenor of functioning of his organization, generated out of his experience within and with the organization..." (p 162)

> "The suggestion and implication is that in climate studies organizations are better not asked but observed, or both observed and asked, and more observed than asked." (p 160)

James (1982), while hardly advocating the abandoment of quantitative measurement, does find problems with the assumption that aggregated scores (means) imply perceptual agreement among individuals. He cautions that:

> "... aggregation bias in estimates of agreement might lead one to believe that the organization is an appropriate level for aggregation of climate perceptions when in fact environments that are more homogeneous in regard to positions and individuals (e.g., work goups, job types) are the more appropriate levels for aggregation." (p 228)

Schneider and Reichers (1983) also found the aggregation problem to be one of the two major difficulties in OC research. Their concern was with the definition of the groups

whose member scores would be averaged. Should one form groups by "... manager-subordinate dyads, [or by] work groups under the supervision of a single leader, [or by] functional units engaged in the same task... and so on." (p 23, 24)

The other major problem they found was the lack of criterion relevance that results from the attempt to develop and apply universal climate measures to particular organizations. They comment that:

> "The climate construct is so intuitively appealing to uninitiated researchers that they seem to want a measure of "it." As noted above, climate is not an "it," but a set of "its," each with a particular referent. Unfortunately, omnibus (or non-specific) measures are frequently used in climate research. This is unfortunate not only because climate is not an omnibus construct conceptually, but also because these non-specific measures of climate are useless for anything but the most gross description of the range of variation in organizations... In brief, the more comprehensive the measure is in attempting to assess "the" organization, the less useful it will be in aiding understanding of specific issues." (p22, 23)

The authors proceed to discuss the etiology of climates in the context of Mead's (1934) work on self and identity. The interesting point however, is their thesis that climates "emerge" out of interaction. This approach is perhaps the most dynamic conception yet of OC. They also note that different views on the etiology of climates is a probable result, among other things, "...of divergent opinions about human nature and the proper means of conducting social science." (p 35)

While there is other OC literature that has been published in the early 1980's (Field and Abelson, 1982; Joyce and

Slocum, 1982; Heller, Guastello and Aderman, 1982; as well as numerous unpublished theses) they mostly either review the same ground or proceed farther down the quantitative road of mainstream OC research.

## SECTION III: SUMMARY

Organizational Climate, as a concept, arose out of a desire to understand the nature of person-environment interactions. Unfortunately, there has been far too little development of a theory base which would comprehensively explain the nature of this interaction and far too much research devoted to the development of instruments to measure "something." What little theory exists, is derived primarily from work in other fields (Murray's "need/press," leadership behavior/mangement styles) and has served mainly as a jumping off point for particular measurement projects.

This may be a reflection of a need on the part of behavioral scientists to understand the world in terms of quantifiable data. It may also reflect a lack of synergistic communication between researchers and practitioners. In the last five to ten years however, there has been an increasing awareness on the part of OC researchers that the lack of theory is a serious deficit hampering the collection of valid

and reliable data.

This is not to say that there have not been valuable results gained from the research to date. Some conclusions seem to stand out:

1. While there is consensus that OC "exists," there is no consensus as to whether instruments are measuring perceptions of individuals or attributes of an organizations. This suggests that a first priority of researchers ought to be to get a firmer grip on their epistemological ground. Are quarks "real"? Do we create what we set out to measure? What assumptions about the nature of reality and human interaction are hidden in the instruments of behavioral scientists? Are empirical techniques culture-bound blinders?

2. There is no data that shows that OC is convincingly correlated with organizational outcomes and that such a correlation can be repeatedly demonstrated over time with a variety of organizations. In fact, there is no solid understanding of what organizational outcomes are and how to measure them. It is perhaps pointless to try to determine whether or not OC is a dependent, independent, or moderating variable of an outcome when we don't know to begin with what a valid outcome is.

3. There is an emerging consensus that organizations do

not have a climate, but rather a set of climates depending upon the level, function and generation of the members surveyed. There is as yet no research on the interaction of multiple climates in an organization. Still further, there is a paucity of understanding as to how organizations link together and interact.

4. The aggregation of mean scores requires careful consideration. There appears to be a consensus that the lower the standard deviation, the more valid the score. This does not, however, address the informative nature of the range of scores.

5. There is an absolute absence of literature on how to interpret and use OC data. This highlights all the more the paucity of interaction between researchers and practitioners. Future research might seek out the needs of practitioners and design studies that will have pragmatic bearing on the process of intervention.

6. There is no one, grand, pan-organizational set of OC dimensions. OC appears to be very specific to individual organizational situations. This suggests that effort might be profitably expended in developing an OC assessment process that could be flexibly applied depending upon the organizational situation.

7. Some research has tentatively explored the effect of personality on OC perception. However, no instruments as yet have incorporated scales to detect response or personality bias as do the "L", "K" and "F" scales on the Minnesota Multi-phasic Personality Inventory.

8. No research appears to have come to grip with the ipsative nature of OC scores. Greater functionality might be obtained from instruments that contain response definitions that include absolute referents.

9. The primary data gathering technique has been the multiple choice survey instrument. Little research has been expended on testing the validity of such instruments for eliciting consistent and valid responses from people with differing language ability, regional dialects, cultural norms, socio-economic status, education level, etc. In addition, there is very little experimentation with different modes of measurement and data gathering: case study; narrative interview; graffiti; direct behavioral observations; etc.

10. There have been no studies in OC literature that discuss the expectations raised by conducting an instrumented survey. Is it helpful or harmful? When respondents are asked whether they are satisfied with

the degree of warmth or trust in their organization, what do they expect to happen as a result of their participation? Similarly, there is no data that examines the effect of prior expectations on response bias. If the respondents do not, for example, trust management, will that suspicion cause them to say "Yes" to the question, "Do you trust your supervisor?"

11. No work to date has attempted to study the effect of the physical environment on OC, or the effect of OC perceptions on health.

So, finally, in our attempt to come to grips with the "thing behind the behaviors," it would seem that the concept of Organizational Climate and its attendant meaurement techniques do not significantly advance our understanding of group behavior. Indeed, it is more a myth of measurement than a substantive concept.

If, for some of us, OC nonetheless retains its intuitive allure, it is recommended that future effort be expended not in emperical research but in the formulation of an epistemologically sound theoretical base and the development of pragmatic methodologies of application.

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